Upright Rushes with Side Flowers in Edinburgh / Lothians

Outline

• This document outlines the regional rushes whose visual form is of leafless round stems with the flowers appearing from the sides rather than the ends.

• Technically, the stem-like part above the flowers is called the bract, and below the flower is the stem proper.

Quick Reference

Stems Greyish - Hard, Baltic, Sea
Stems Sharp-Tipped - Sea, Sharp
Creeping - Sea, Baltic, Thread

Flowers Compact - Compact, Soft
Flowers Few - Baltic, Thread
Fruits Flat-Shouldered - Soft, Compact
Fruits Fat - Sharp, Thread, (Soft, Compact)

Species Covered

Soft Rush - Juncus effusus - Universal in damp spots.
Compact Rush - Juncus conglomeratus - Common in damp ground (outside city).
Hard Rush - Juncus inflexus - Common except on hills.
Sea Rush - Juncus maritimus - Coastal, very rare (old records at Gullane & W of Bridge + recently at S of Berwick-upon-Tweed).
Baltic Rush - Juncus balticus - Dundee estuary mouth.
Thread Rush - Juncus filiformis - Loch Leven.

Hybrids

Soft x Hard - Juncus x diffusus = J. effusus x inflexus - Occasional records just outside of region.
Compact x Soft - Juncus x kern-reichgeltii = J. conglomeratus x effusus - very rare records in the hills.

Also in the UK

Sharp Rush - Juncus acutus - South-facing coasts in the south of Britain & Ireland - Sharp-tipped end (cf. Sea Rush), and flowers more in a ball with dense fruits that are broad, nut-like and protrude greatly from the surrounding tepals.

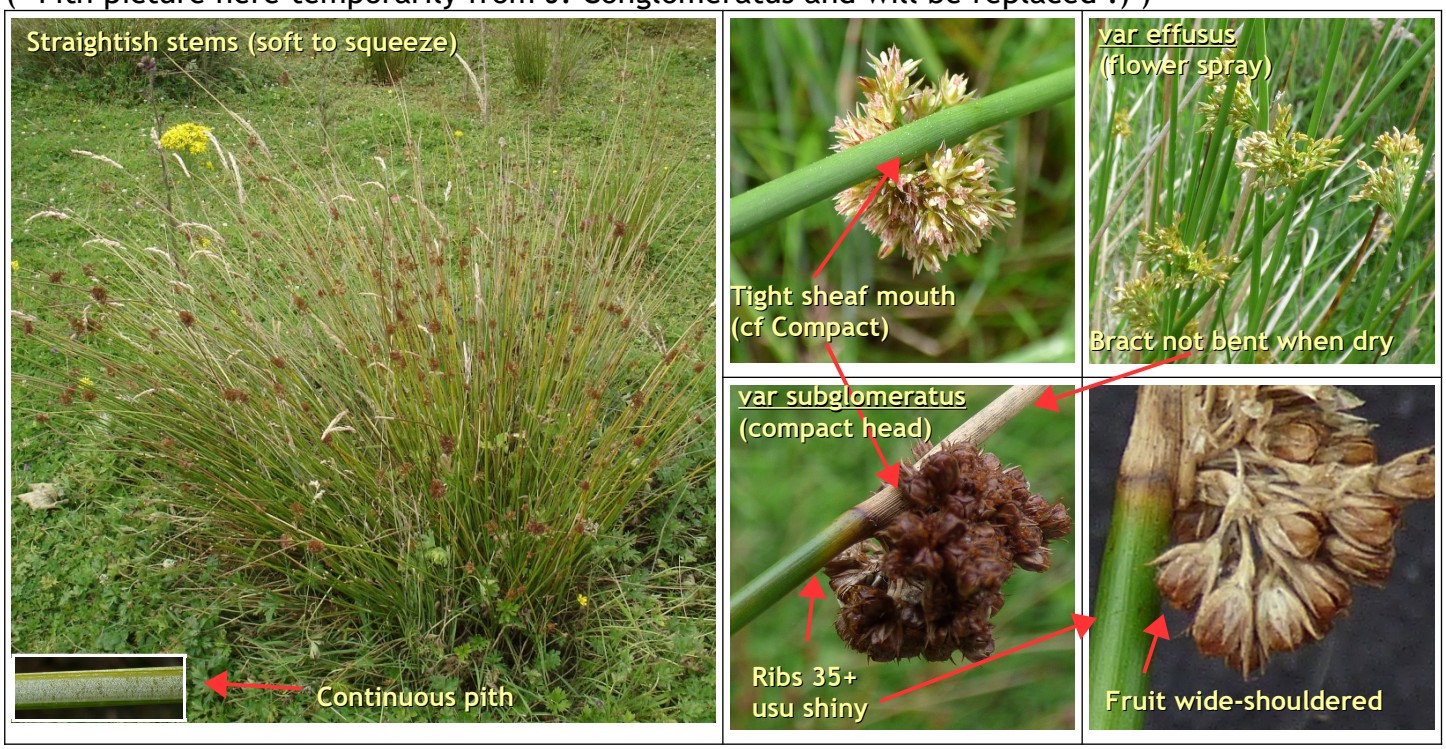
Fruits

In the following fruits, note if: the nut top is lower, equal to or above the tepals*; the nut is fat (#5-6) or slim; if the nut's shoulders are flat (#1-2) or down-sloping.
* The tepals are the 6 leafy bits around the nut (3 illustrated for each here).

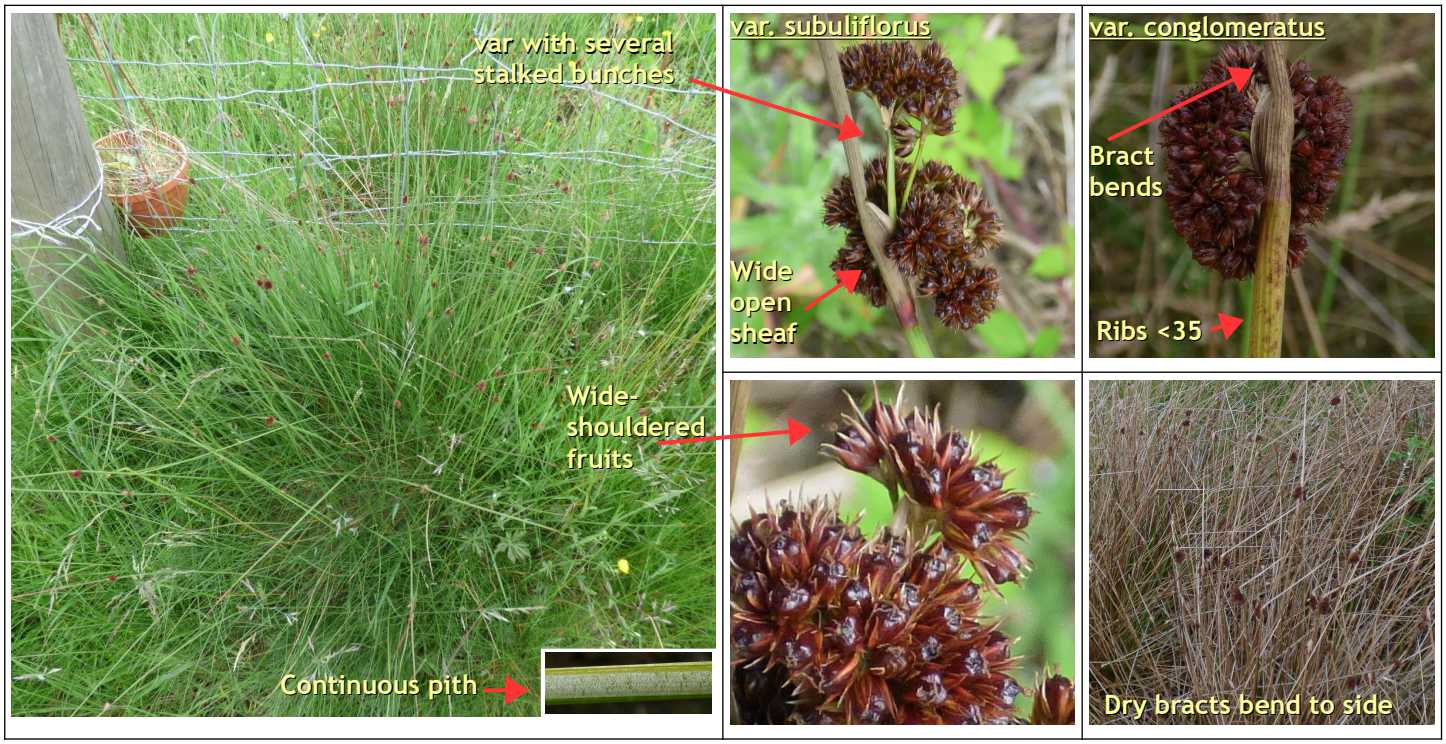
Soft (effusus)	Compact (conglomeratus)	Hard (inflexus)	Sea (maritimus)
Baltic (balticus)	Thread (filiformis)	Sharp (acutus)	

Guide

Soft Rush - Universal in damp spots, often forming dense areas - Juncus effusus
var effusus - Common, has a spray of flowers (pic 3)
var subglomeratus (=compactus) - Common, has a compact head of flowers (pic 4), which can look like Compact Rush except the ribs are >35 (v <35) and the bract stays straight (v bends to the side).
var spiralis (=suberectus) - Unrecorded, a form likely to be met cultivated with corkscrew stems more spreading (often horizontal).
(* Pith picture here temporarily from J. Conglomeratus and will be replaced :))

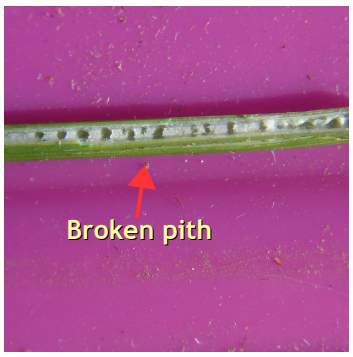


Compact Rush - Common in damp ground (usually outside city) - Juncus conglomeratus
var. conglomeratus - a compact rounded head
var. subuliflorus - several stalked heads

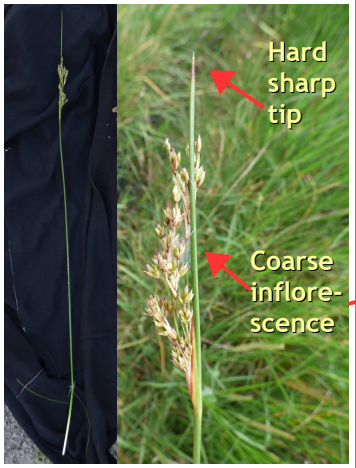


Comparison of Compact Rush, left, and Soft var subglomeratus, right.
Note the different ribbing count (<35 v >35), the bending of the bract on Compact, the openness of the sheath on compact.

Hard Rush - Common except on hills - Juncus inflexus
* If the pith is unbroken and stems not bluey, but flowers as shown, look to the hybrid with effusus.



Sea Rush - Coastal, very rare (old records at Gullane & W of Bridge + recently at S of Berwick-upon-Tweed) - Juncus maritimus

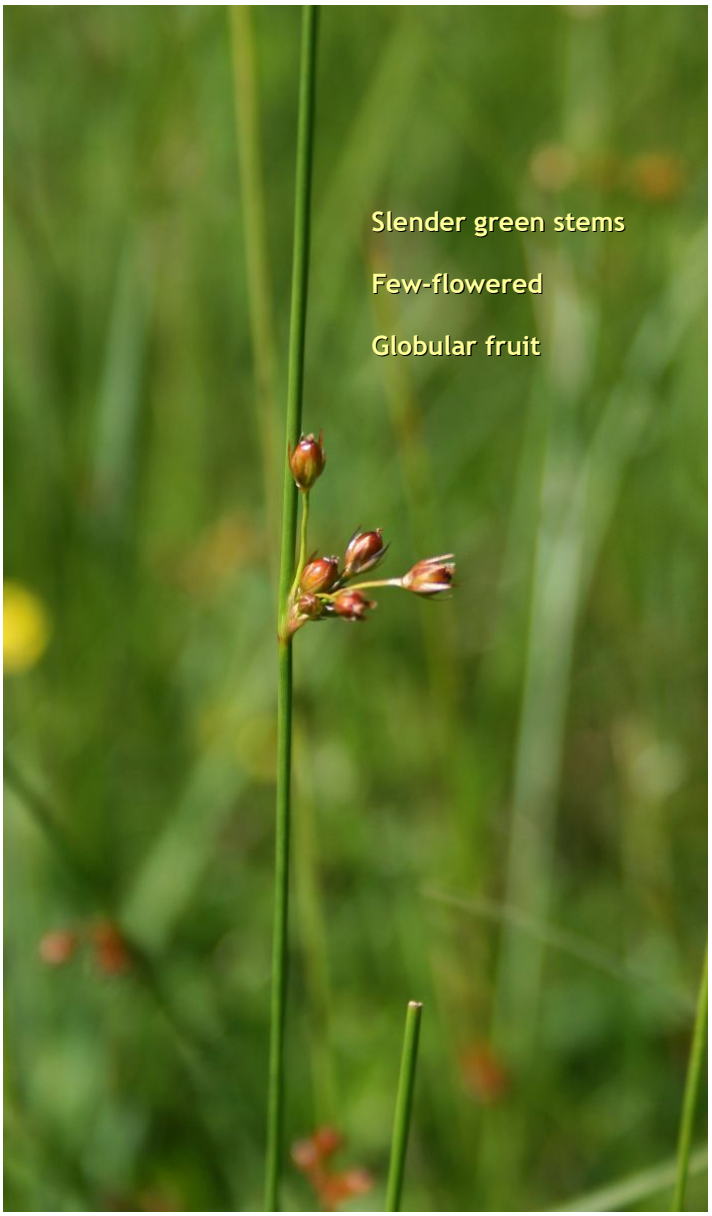


Baltic Rush - Dundee estuary mouth - Juncus balticus

This rush creeps in straight lines throwing up greyish stems, creating the appearance of rows when freely spreading. Pith continuous. Fruit down-shouldered.

Pic 1 Rows : Rob Routledge, Sault College, Bugwood.org
Pic 2 Flowers : gobotany.nativeplanttrust.org
Pic 3 Fruit : Phil Smith

Thread Rush - Loch Leven - Juncus filiformis
Creeping with stems in rows (cf Baltic Rush) however (as labelled) stems green and slender with few flowers. Fruits globular.
Pic 1 Plant : Franz Xaver



Hybrids

Due to difficulty in recognising, hybrids will often be under-reported.

Juncus x diffusus = J. effusus x inflexus (Soft x Hard) - Occasional records just outside of region, of isolated plants which have apx continuous pith and non-glaucous (as Soft / effusus) but inflorescence shape as Hard / inflexus.
Juncus x kern-reichgeltii = J. conglomeratus x effusus (Compact x Soft) - very rare records in the hills : intermediate between Compact and Soft; of high fertility and hard to determine.

Also in the UK

Sharp Rush - Juncus acutus - South-facing coasts in the south of Britain & Ireland - Sharp-tipped end (cf. Sea Rush), and flowers more in a ball with dense fruits that are broad, nut-like and protrude greatly from the surrounding tepals.

Info

Updated : 2019-11-29 b – please check you have the latest version!

Contact : David Merrick – facebook.com/meteorquake

Facebook Botany Group for Lothians : facebook.com/groups/lothiansbotany

All items in this Series : paintdrawer.co.uk/nature/edinburgh/downloads.htm